

# P81015-LED SERIES

6" LED New Construction Downlight

## Specifications:

### Description:

LED Recessed Commercial modules are designed for use in IC and Non-IC new construction P81015-LED recessed housings. 800, 1100 and 1500 lumen output levels that are comparable to 26 and 32 watt CFL, while consuming only 10-20 watts respectively. Suitable for use with continuous room side ambient temperature up to 25°C with minimum 60,000 hours life expectancy.

### Housing:

- Galvanized steel housing with full wraparound plaster frame
- ½" to 1 ½" thick ceiling
- Includes universal J-Box with snap-out sides, ½" and ¾" knock outs for rigid or BX fittings
- Integral snap-on T-bar grip-lock feature and rigid 24" telescoping bar hanger design.
- Joist alignment and nail removal features for easy installation and re-positioning

### Reflector:

- Modules come standard with a diffused optical grade acrylic lens and glare control
- Reflector options: Clear Alzak and powder coat white, black and metallic silver finishes.

### LED Light Engine:

- 2700K to 4000K, 90 CRI standard
- System designed for optimal life and lumen maintenance (60,000 hours at 70% lumen maintenance per TM-21)

### LED Drive/ Dimming:

- Universal driver 120V-277V
- 50/60Hz with >0.9 power factor
- Flicker-free 0-10V dimming to 1% with most standard dimmers (see Dimming Notes)

### Labeling:

- cCSAus certified to US and Canadian standards
- Suitable for wet locations
- Energy Star
- California Title 24 non-residential usage
- 5 year warranty

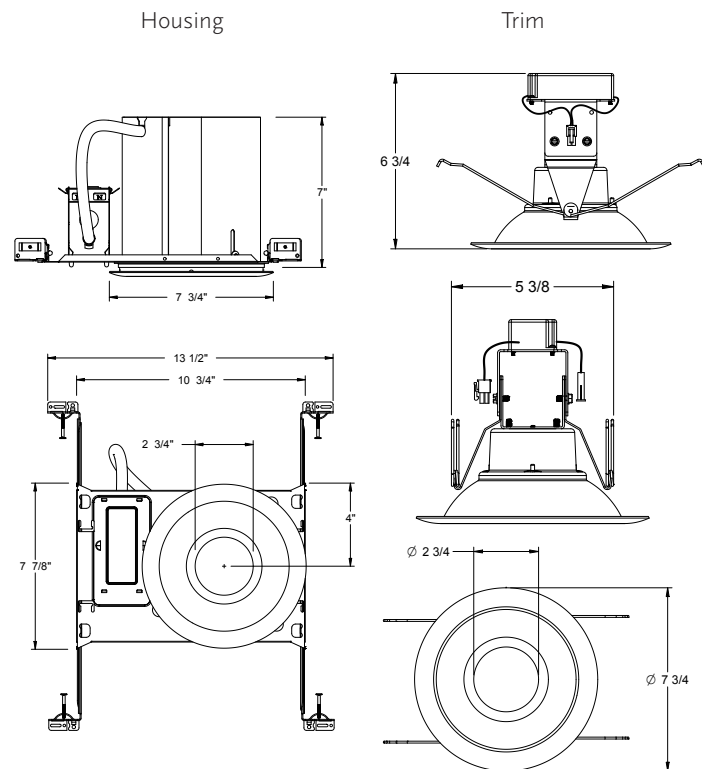
### Catalog number:

Housing	Trim	Reflector Finish	Color Temp.
<b>P81015</b> - LED 6" LED New Construction	<b>P81017</b> - 6" 800 Lumens <b>P81018</b> - 6" 1100 Lumens <b>P81019</b> - 6" 1500 Lumens*	<b>021</b> - Clear Alzak <b>028</b> - White <b>031</b> - Black <b>121</b> - Metallic Silver	<b>27K</b> - 2700K <b>30K</b> - 3000K <b>35K</b> - 3500K <b>40K</b> - 4000K
	<b>P81020</b> - 6" 800 Lumens Wall Wash <b>P81021</b> - 6" 1100 Lumens Wall Wash <b>P81022</b> - 6" 1500 Lumens Wall Wash*		

### Image:



### Dimensions:



\*NOTE: 1500 Lumen package is not IC Rated

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## Photometrics:

P81019-028-30K	
LED Light Engine	3000K 92CRI
System Wattage	20.2
Fixture Delivered Lumens	1539
Fixture Efficacy	76.2
Spacing Criterion	1.1

### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	668	43.4%
0-40	1031	67.0%
0-60	1467	95.3%
0-90	1539	100.0%

### CANDELA DISTRIBUTION

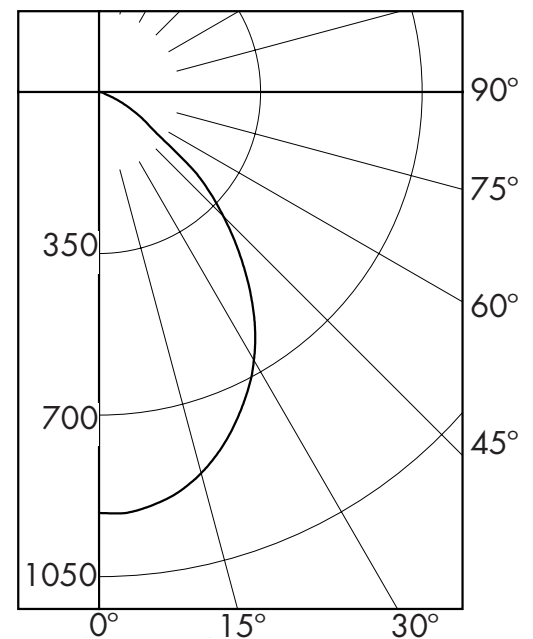
DEG	CANDELA
0	912
5	911
15	855
25	742
35	584
45	381
55	144
65	53
75	12
85	4
90	0

### COEFFICIENTS OF UTILIZATION

#### Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance				% Effective Floor Cavity Reflectance				% Wall Reflectance			
	80%   70%   50%   30%				20% Effective Floor Cavity Reflectance							
	70	50	30	10	70	30	50	30	50	30	50	30
1	112	108	105	102	109	103	102	100	98	96		
3	97	89	82	77	95	81	85	80	82	78		
5	84	74	66	61	82	66	71	65	69	63		
7	74	62	55	49	72	54	60	53	58	53		
9	65	53	46	41	64	46	51	45	50	45		

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

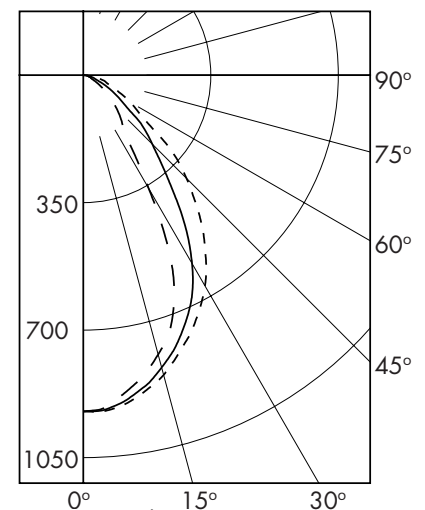
P81022-028-30K	
LED Light Engine	3000K 92CRI
System Watts	20.2
Fixture Delivered Lumens	1336
Fixture Efficacy	66.1

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	0 DEG	90 DEG	180 DEG
45°	31077	20770	9997
55°	18535	12803	6592
65°	13615	8558	3631
75°	12492	6140	3811
85°	3773	1886	3773

### CANDELA DISTRIBUTION

DEG	0	90	180
0	923	923	923
5	920	914	903
15	852	831	794
25	736	696	575
35	583	475	209
45	401	268	129
55	194	134	69
65	105	66	28
75	59	29	18
85	6	3	6
90	0	0	0



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ELECTRICAL DATA	P81019	P81022	P81018	P81021	P81017	P81020
INPUT VOLTAGE	120-277V					
INPUT FREQUENCY	50/60Hz					
INPUT CURRENT 120V	0.17A	0.17A	0.10A	0.10A	0.09A	0.09A
INPUT CURRENT 277V	0.07A	0.07A	0.04A	0.04A	0.04A	0.04A
INPUT POWER	20.2W	20.2W	12.0W	12.0W	10.4W	10.4W
CONSTANT CURRENT OUTPUT	500mA	500mA	300mA	300mA	250mA	250mA
DELIVERED LUMENS	1539	1336	1050	936	808	712
EFFICACY (LUMENS PER WATT)	76.2	66.1	87.5	78.0	77.7	68.5
POWER FACTOR	>0.90					
THD	<20%					
EMI FILTERING	FCC 47CFR Part 15, Class B (120V) Class A (277V)					
OPERATING TEMPERATURE	-30°C to 25°C		-30°C to 35°C		-30°C to 35°C	
DIMMING	0-10V & TRIAC (See Dimming Notes for more information)					

Over-voltage, over-current, short circuit protected

## Dimming Notes:

LED Recessed Commercial modules are designed to be compatible with many dimmer controls. Incandescent type dimmers are not recommended. The following is a partial list of known compatible dimmer controls:

## Dimmer Controls:

Lutron	Diva Series DVELV-300
Leviton	Renior II AWRMG-EAW
Lutron	NTFTV
Leviton	AWSMT-7
Wattstopper	ADF-120277

Dimming capabilities will vary depending on the dimmer control, load, and circuit installation. Always refer to dimmer manufacturer instructions or a controls specialist for specific requirements. Dimmer control brand names where identified above are trade names or registered trademarks of each respective company.